

## Attachment 2

### **MODEL Clean Air Vehicle Ordinance** **for Adoption by Local Public Agencies**

This ordinance would amend local codes that govern procurement of vehicles for the public agency fleet, building codes and development requirements, and parking enforcement.

Be it ordained by the People of the *(insert name of local agency)*:  
*(insert name of local agency)* Codes *(need to insert the appropriate CODES such as*  
*ADMINISTRATIVE, GENERAL, BUILDING or PLANNING, TRAFFIC, ETC.)* are  
hereby amended by adding Chapter (\_\_\_), to read as follows:

#### **CHAPTER (\_\_\_)**

#### **CLEAN AIR VEHICLE PROGRAM**

**SEC. \_\_.1 FINDINGS AND PURPOSE.** The *(insert name of governing board of*  
*local agency)* finds that:

(a) Air pollution is a major public health concern in California. The San Francisco Bay Area is currently designated as non-attainment for the one-hour Federal ozone standard, as well as the more stringent State ozone standard. Air pollution can cause or aggravate lung illnesses such as acute respiratory infections, asthma, chronic bronchitis, emphysema, and lung cancer. In addition to health impacts, air pollution imposes significant economic costs and negative impacts on our quality of life.

1 (b) On-road motor vehicle emissions are the primary source of ozone  
2 precursors in the Bay Area. In addition, motor vehicle emissions are a major source of  
3 carbon monoxide, particulate matter, toxic air contaminants, and greenhouse gases.  
4 Although new cars have become much cleaner thanks to improved emission control  
5 systems and cleaner fuels, the rapid growth in motor vehicle population and in the  
6 number of miles we drive are eroding our progress in improving regional air quality. In  
7 addition, conventional vehicles produce higher emissions as their emission control  
8 systems wear out over time. (This problem does not occur with electric and natural  
9 gas vehicles, which are inherently cleaner.)

10 (c) The California Air Resources Board (CARB) has adopted regulations to  
11 require major auto manufacturers to produce zero emission vehicles (ZEVs), as well  
12 as other clean, advanced technology vehicles that qualify for partial zero emission  
13 vehicle credits. The ZEV regulation is an important element in the overall strategy to  
14 achieve and maintain air quality standards in the Bay Area and throughout California.  
15 In addition to eliminating tailpipe emissions, zero emission vehicles also reduce the  
16 emissions associated with oil refining and gasoline dispensing, both of which are  
17 significant sources of emissions.

18 (d) Local public agencies can play an important role in improving air quality and  
19 ensuring the success of the ZEV regulations by acquiring ZEVs and other clean air  
20 vehicles for our own fleets, installing electric vehicle charging equipment for  
21 government and public/private use, and by taking other actions to ensure that our  
22 communities are "EV-ready." Public fleets are well-suited for electric vehicles and  
23 other alternative fuel, clean air vehicles because fleet vehicles are centrally fueled and  
24 are typically used for predictable, short and medium distance trips.

1 (e) Local fleets can achieve savings in maintenance and operating costs of  
2 clean air vehicles compared to conventional vehicles. In addition, developing a  
3 program to acquire zero emission vehicles and clean air vehicles may help (*insert name*  
4 *of local agency*) to comply with any forthcoming government mandates to acquire clean  
5 air vehicles.

6 (f) Grant funding, and other subsidies and incentives, may be available from  
7 federal, state, or local sources to cover the incremental cost of clean air vehicles and  
8 to defray the cost of refueling/recharging infrastructure needed to support alternative  
9 fuel vehicles.

10 (g) In addition to improving air quality and reducing fleet operating costs, clean  
11 air vehicles offer a range of benefits, including greater energy efficiency and energy  
12 diversity, reduced CO2 emissions (global warming), and reduced water pollution and  
13 noise pollution.

14 (h) Under this Chapter, a Clean Air Vehicle Program is established by (*insert*  
15 *name of local agency*) to promote the use of clean air vehicles (including battery electric,  
16 natural gas, fuel cell, plug-in hybrids, and other advanced technology, ultra clean  
17 vehicles) in the (*insert name of local agency*) motor vehicle fleet; to install publicly-  
18 accessible electric vehicle charging stations; to require that new development projects  
19 include facilities to accommodate electric vehicles; and to provide for enforcement of  
20 electric vehicle parking.

21 **SEC. \_\_.2 DEFINITIONS.**

22 (a) "Clean Air Vehicle" means a light duty vehicle (as defined below) that has  
23 been certified by the California Air Resources Board to meet either the ultra low  
24 emission vehicle (ULEV) standard, the super ultra low emission vehicle (SULEV)  
25 standard, or the zero emission vehicle (ZEV) standard.

1 (b) "Electric Vehicle Charging Equipment" means a device to recharge the  
2 batteries in an electric vehicle. EVs may be recharged by either "conductive" or  
3 "inductive" charging systems. EV charging equipment should conform to the standards  
4 set forth in NEC Code 625, SAE Code Sections J1772 and J1773, and UL codes  
5 1998, 2202, and 2231.

6 (c) "Electric Vehicle" means a zero emission vehicle that derives its driving  
7 power from one or more electric motors, stores power in electric batteries, recharges  
8 its batteries directly from the electric grid, and has no internal combustion engine.

9 (d) "Full Function Electric Vehicle" means a four-wheel electric vehicle with  
10 capacity to carry at least two people, that is capable of and designed for operation on  
11 freeways, and meets all applicable federal motor vehicle safety standards.

12 (e) "Light Duty Vehicle" means any car, van, or truck with a manufacturer's  
13 gross vehicle weight rating of 8,500 pounds or less.

14 (f) "Neighborhood Electric Vehicle" (NEV) means a four-wheel electric vehicle  
15 with a top speed of 25 miles per hour that can be legally driven on streets and roads  
16 with a speed limit of 35 miles per hour or less.

17 (g) "Partial Zero Emission Vehicle (PZEV) Credits" are credits defined by the  
18 California Air Resources Board (CARB), whereby vehicles that meet the CARB PZEV  
19 criteria qualify for partial credit toward CARB's Zero Emission Vehicle mandate.

20 (h) "Super Ultra Low Emission Vehicle" (SULEV) means any vehicle that has  
21 been certified by the California Air Resources Board as a super ultra low emission  
22 vehicle based upon the standards set forth in 13 California Code of Regulations §  
23 1960.1 and 1961 for Super Ultra Low Emission Vehicles.

24 (i) "Ultra Low Emission Vehicle" (ULEV) means any vehicle that has been  
25 certified by the California Air Resources Board as an ultra low emission vehicle based

1 upon the standards set forth in 13 California Code of Regulations § 1960.1 and 1961  
2 for Ultra Low Emission Vehicles.

3 (j) "Zero Emission Vehicle" (ZEV) means any vehicle that has been certified by  
4 the California Air Resources Board as a zero emission vehicle under any and all  
5 possible operational modes and conditions pursuant to Title 13 California Code of  
6 Regulations §1962(e). Zero emission vehicles may be propelled by batteries or by  
7 fuel cells.

8 **SEC. \_\_.3 CLEAN AIR VEHICLE PROGRAM.**

9 (a) There is hereby established a program to be known as the Clean Air  
10 Vehicle Program to be administered by the *(insert the name of the appropriate department*  
11 *within the local agency. This should be the department that exercises decisions regarding*  
12 *vehicle purchases and procurement)* under the direction of the *(insert title of responsible*  
13 *manager: e.g. Fleet Manager)*, hereafter referred to as the Program Manager. The  
14 Program Manager shall be responsible for implementing the provisions of this Chapter,  
15 including: developing and implementing a plan for the acquisition of zero emission  
16 vehicles and clean air vehicles by all departments; training staff in the use of such  
17 vehicles; identifying necessary budgetary resources; analyzing and installing refueling  
18 / recharging infrastructure needed to support alternative fuel vehicles; coordinating the  
19 installation of publicly-accessible electric vehicle charging equipment; and preparing  
20 the annual progress report on the Program. In developing the clean air vehicle  
21 acquisition plan, emphasis should be placed on replacing the oldest, most highly  
22 polluting vehicles in the *(insert name of local agency) fleet. (core provision)*

23 (b) Rules and Regulations. The Program Manager *(or insert Director of*  
24 *department in charge of the Program, such as General Services, Public Works, etc.)* may  
25

1 promulgate such administrative, management memorandum and/or regulations as may  
2 be necessary to carry out the requirements of this Chapter. *(optional provision)*

3 (c) Advisory Committee. Within three (3) months from the adoption of this  
4 ordinance, the *(insert name of local agency)* shall create a Clean Air Vehicle Advisory  
5 Committee. The Advisory Committee shall be responsible for helping to draft the  
6 Clean Air Vehicle Program; reviewing and approving the final Program; and reviewing  
7 the Annual Report prior to its submittal to the *(insert name of governing board of local*  
8 *agency)*. The membership of the Advisory Committee shall include *(recommended*  
9 *members include, at a minimum, one member of the City Council, one representative from the*  
10 *fleet services department, one representative from the parking or traffic department, one*  
11 *representative from the planning department, one representative from the local air quality*  
12 *district, and one representative from an environmental organization)*. The Advisory  
13 Committee shall meet at least twice per year to review the development and  
14 implementation of the Program. *(optional provision)*

15 **SEC. \_\_.4. PROCUREMENT OF ZERO EMISSION VEHICLES**

16 (a) In acquiring new light duty vehicles (as defined in Section \_\_.2), the *(insert*  
17 *name of local agency)* shall purchase or lease zero emission vehicles (ZEVs) to the  
18 greatest extent possible. The Program Manager shall develop a ZEV acquisition plan  
19 to achieve or exceed the numerical targets set forth in Section \_\_4(b) below. In  
20 developing the plan, the Program Manager shall analyze the specifications and duty  
21 cycle for each vehicle to identify those components of the fleet that are best suited to  
22 zero emission vehicles. The plan shall focus on placing ZEVs in applications where  
23 the daily duty cycle entails short and medium distance trips with many stops and  
24 starts. *(core provision)*

1           (b) Numerical Targets. *(Every ordinance should include specific numerical targets:*  
2 *e.g. a percentage of fleet purchases per year. Attachment A provides recommended ZEV /*  
3 *PZEV targets based upon the CARB ZEV mandate. The recommended targets begin at 6% of*  
4 *new vehicles acquired during the 2003-2005 period, using the vehicle credit factors provided in*  
5 *Attachment A . Alternatively, the public agency may choose to establish its own numerical*  
6 *targets.) (core provision)*

7           (c) Multi-year Averaging. In meeting the ZEV acquisition target, the Program  
8 Manager may apply credit (on a one-for-one basis) for any zero emission or PZEV  
9 vehicles acquired prior to model year 2003. In addition, the *(insert name of local agency)*  
10 may achieve the ZEV acquisition targets on the basis of multi-year averaging (e.g.  
11 over a two or three year period). *(optional provision)*

12           (d) Exemptions. The *(insert name of local agency)* shall endeavor to fulfill the ZEV  
13 vehicle acquisition targets defined in Section \_\_. 4(b) above on an annual basis.  
14 However, the ZEV targets described in Section \_\_.4(b) above may be waived by the  
15 Program Manager based upon a documented demonstration that zero emission  
16 vehicles and/or vehicles that qualify for partial ZEV credits are not available in  
17 sufficient quantities to fully comply with the ZEV target. In such case, the *(insert name*  
18 *of local agency)* shall acquire the maximum number of ZEVs or partial ZEVs possible,  
19 and shall endeavor to acquire additional ZEVs in future years to make up for any  
20 shortfall.

21           Alternatively, the Program Manager may grant an exemption based upon a  
22 determination that the costs of the zero emission vehicle, computed over the full life  
23 cycle (or lease term) of the vehicle, would exceed the cost of an equivalent  
24 conventional fuel vehicle by 50% or more. Said determination shall be based upon an  
25 analysis comparing the cost of the ZEV or PZEV vehicle (including any and all

1 subsidies and incentives available for the ZEV or PZEV vehicle) to an equivalent  
2 conventional (gasoline or diesel) vehicle. The analysis shall demonstrate that the cost  
3 differential cannot be recovered over the operating life of the vehicle through savings  
4 in fuel, maintenance, and other costs incurred during the operating life of such vehicle.  
5 The Program Manager shall explain and document any such exemption in the Annual  
6 Report to the *(insert name of governing board of local agency)*. *(core provision)*

7 **SEC. \_\_.5. PROCUREMENT OF LIGHT DUTY CLEAN AIR VEHICLES**

8 (a) Beginning 90 days from the effective date of this Chapter, all new light duty  
9 vehicles of any fuel type purchased or leased by *(insert name of local agency)* shall be  
10 certified by the California Air Resources Board as achieving either the ultra low  
11 emission vehicle (ULEV) standard, the super ultra low emission vehicle (SULEV)  
12 standard, or the zero emission vehicle (ZEV) standard. *(Note: a list of vehicles that*  
13 *achieve the ULEV and SULEV standards is available on the CARB website at*  
14 *<http://www.arb.ca.gov/msprog/ccbg/ccbg.htm>.)* *(core provision)*

15 (b) Exemptions.

16 (1) Section \_\_. 5(a) shall not apply to any motor vehicles that are used primarily  
17 for law enforcement, public safety or emergency response purposes (e.g. police  
18 vehicles, fire vehicles, and ambulances). However, the *(insert name of local agency)*  
19 shall endeavor to acquire the cleanest (lowest emission) vehicles that are available for  
20 such purposes. This exemption is not intended to preclude the use of zero emission  
21 vehicles or clean air vehicles for law enforcement, public safety, or emergency  
22 response purposes.

23 (2) The requirement that all new light duty vehicles must achieve the ULEV,  
24 SULEV, or ZEV standard may be waived by the Program Manager on a case-by-case  
25 basis when no ULEV, SULEV, or ZEV-certified vehicle is available that achieves the



essential vehicle specifications for the use or the application in which the vehicle will be employed. The Program Manager shall document the particular vehicle specifications and vehicle user characteristics that warrant any such exemption, and shall explain any such exemptions in the Annual Report to the *(insert name of governing board of local agency)*. In the event that no ULEV or cleaner vehicle is available, the *(insert name of local agency)* shall acquire the lowest emission vehicle available that meets the vehicle requirements. *(core provision)*

#### **SEC. \_\_.6. PRIVATE SECTOR FLEETS**

The *(insert name of local agency)* shall develop a plan to encourage or require fleets that operate within the *(insert name of local agency)* to procure zero emission vehicles and other clean air vehicles. The plan should focus on fleets that have contracts for city business or that operate under *(insert name of local agency)*-issued permit, such as taxi operators, waste haulers, etc. In awarding contracts for services, the *(insert name of local agency)* should consider granting preference or special consideration to bidders that operate clean air vehicles in their fleets. The *(insert name of local agency)* should also consider cooperating with local fleets to share recharging or refueling infrastructure needed to support electric vehicles or other types of alternative fuel vehicles, such as natural gas vehicles. *(optional provision)*

#### **SEC. \_\_.7. ANNUAL PROGRESS REPORT** *(core provision)*

Not later than September 1 *(or insert alternate date)* of each fiscal year, the Program Manager shall submit to the *(insert name of governing body of local agency)* an annual progress report which includes the following:

(1) a summary of all vehicles purchased or leased during the preceding year, and the CARB emissions rating for each vehicle;

(2) the percentage of zero emission and partial zero emission vehicles purchased or leased, and a demonstration that the *(insert name of local agency)* has complied with the clean air vehicle acquisition targets established in Sections \_\_\_.4(b) and \_\_\_.5(a);

(3) a description of any exemptions to the zero emission vehicle and clean air vehicle acquisition policies, and an explanation of the justification for any such exemptions;

(4) a summary of the operational experience and user satisfaction with the various clean air vehicles;

(5) a description of the clean air vehicle acquisition plan for the new fiscal year;

(6) a description and location of any electric vehicle charging equipment installed per Sections \_\_ and \_\_, and a description of plans for installation of electric vehicle charging equipment in the new fiscal year;

(7) a description of progress in encouraging and/or requiring private sector fleets that operate under permit or contract to the *(name of local agency)* to procure zero emission vehicles and other clean air vehicles in their fleets;

(8) other actions taken to implement the Clean Air Vehicle Program, or additional information relevant to the Program.

*This Section amends the Building Code or Planning Code to add provisions relating to electric vehicle charging equipment:*

Adding a new Section \_\_, and amending Section \_\_ of *(insert name of local agency and the appropriate code section, such as the planning code)* to read as follows:

**SEC. \_\_. ELECTRIC VEHICLE CHARGING EQUIPMENT**

1 (a) EV Charging at Public Facilities. The *(insert name of local agency)* shall  
2 implement a program to install publicly-accessible electric vehicle charging equipment  
3 at key public facilities and activity centers, such as publicly-owned parking lots and  
4 garages, civic center areas, convention centers, transit stations, museums and  
5 performing arts centers, or other sites controlled or owned by *(insert name of local*  
6 *agency)*. The electric vehicle charging equipment shall be accessible to all electric  
7 vehicle drivers and shall be reserved for the use of electric vehicles only. Said  
8 equipment shall conform to the electric vehicle charging equipment standards  
9 established in Section \_\_. 2 (Definitions) above. EV charging equipment intended for  
10 public use shall provide both conductive and inductive equipment. *(Note: the*  
11 *requirement to provide both conductive and inductive charging equipment can be changed if in*  
12 *the future the industry reaches agreement on a single charging technology, or CARB imposes a*  
13 *standard recharging technology through regulation.)* The *(insert name of local agency)* shall  
14 install signage to indicate that parking spaces equipped with electric vehicle chargers  
15 are reserved for EVs only, and shall also provide local signage to direct drivers to the  
16 EV charging equipment. *(core provision)*

17 (b) New Residential and Commercial Construction. The *(insert name of local*  
18 *agency)* shall require that all new residential and commercial construction be equipped  
19 with electric conduit and breakers capable of providing 208 to 240 volt, single phase  
20 40 ampere power in garage areas or other areas where vehicles will normally be  
21 parked. The electric conduit that is installed must be compatible with the electric  
22 vehicle charging equipment as defined in Section \_\_. 2. For commercial development,  
23 conduit and breakers compatible with electric vehicle charging equipment shall be  
24 provided to serve at least ten (10) percent of the parking spaces in parking garages or  
25

1 other parking structures, and the potential electric vehicle charging spaces must be  
2 easily accessible to all potential electric vehicle drivers. *(core provision)*

3 (c) Electric Vehicle Charging at Major New Developments. Not later than six (6)  
4 months from the effective date of this Chapter, the *(insert name of local agency*  
5 *department responsible for approval of new development; e.g. planning department)*, shall  
6 develop and implement requirements for installation of both conductive and inductive  
7 electric vehicle charging facilities in major new development projects with \_\_\_\_ or more  
8 parking spaces. *(Each ordinance should specify thresholds and ratios based upon the number*  
9 *of parking spaces that will be provided at the new development. The recommended thresholds*  
10 *and ratios for EV charging are as follows: For 500 – 1,000 parking spaces, provide at least two*  
11 *conductive chargers and two inductive chargers. Provide one additional conductive charger*  
12 *and one additional inductive charger for each 250 parking spaces over 1,000. The local*  
13 *agency may consider a cap on the number of electric vehicle chargers required at any new*  
14 *development: e.g. a maximum of 10 conductive chargers and 10 inductive chargers per*  
15 *project.)* The site owner shall be required to install signage to indicate that parking  
16 spaces equipped with electric vehicle chargers are reserved for EVs only. *(core*  
17 *provision)*

18 (d) The *(insert name of local agency)* shall consider reducing the number of  
19 parking spaces required for development projects that voluntarily install EV charging  
20 equipment over and above the required ratio, or for development projects that are not  
21 required to install EV charging equipment, but agree to do so voluntarily. *(optional*  
22 *provision)*

23 (e) Dedicated Parking Spaces for Small Electric Vehicles. Within six months  
24 (6) of adoption of this Chapter, the *(insert name of appropriate department within local*  
25 *agency: e.g. Department of Public Works or Dept. of Parking and Traffic)* shall conduct an

1 analysis of on-street and off-street parking facilities, and shall compile an inventory of  
2 curbside space or other space in commercial and residential districts that can be  
3 identified and reserved as parking spaces for small electric vehicles, such as  
4 “neighborhood” and/or “city” electric vehicles. Within 12 months from the adoption of  
5 this Chapter, the *(insert City Manager or other local agency executive, as appropriate)* shall  
6 propose an implementation plan to *(insert name of governing board of local agency)* to  
7 create reserved parking spaces for small electric vehicles in commercial and  
8 residential districts. *(optional provision)*

9 (f) Waiver of Parking Fees for Zero Emission Vehicles and Clean Air Vehicles.  
10 The *(insert name of local agency)* shall examine the feasibility (and cost in terms of  
11 potential lost revenue) of providing free parking for clean air vehicles at parking  
12 meters or in *(insert name of local agency)*-owned garages and parking lots. If said waiver  
13 of parking fees for qualified clean air vehicles is found to pose no undue financial  
14 hardship, then *(insert name of local agency)* shall modify its regulations to implement  
15 such waiver. *(The simplest way to implement this is to allow free parking for vehicles that*  
16 *qualify for, and are equipped with, the DMV decal which allows “inherently low emission*  
17 *vehicles” to use the high occupancy vehicle lanes on California freeways.) (optional provision)*

18  
19 *This Section amends the Parking Enforcement Code (or equivalent) to add provisions*  
20 *relating to enforcement of parking spaces reserved for electric vehicles:*

21 Adding a new Section \_\_\_, and amending Section \_\_\_ of *(insert name of local agency and*  
22 *the appropriate code section, such as the parking enforcement code)* to read as follows:

**SEC. \_\_\_\_ PARKING CONTROL: BLOCKING AN ELECTRIC VEHICLE  
CHARGING SPACE, OR OTHER PARKING SPACE RESERVED FOR ELECTRIC  
VEHICLES.**

(a) No person shall park or leave standing any vehicle other than an electric vehicle, whether attended or unattended, in a parking space which is identified as an electric vehicle charging site, or otherwise specifically identified as and reserved for electric vehicles. All terms used in this section shall have the same meaning as those terms have for the purposes of Chapter \_\_\_\_ of the *(insert the appropriate code section from local parking or traffic code)*. Any violation of the provisions of this section shall constitute an infraction and a fine of *(insert amount of fine: recommended amount is at least \$100)* shall be levied upon the offending party. *(core provision)*

(b) Any Police Officer or Parking Control Officer may issue a citation to the owner or driver of any non-electric vehicle that has been parked or left standing in a electric vehicle charging space or any other space specifically identified as and reserved for electric vehicle parking. Such citation shall be issued in the same manner and in accordance with the same procedure and with the same effect as citations issued for traffic violations pursuant to the provisions of Article \_\_\_\_, Section \_\_\_\_ *(insert the appropriate code section from local parking or traffic code)* and Sections 41102 and 41103 of the California Vehicle Code. *(core provision)*

**SEC. \_\_\_\_ REMOVAL OF VEHICLE AUTHORIZED.** When appropriate signs are in place citing the appropriate code and giving notice that vehicles will be towed if they park in or block access to parking spaces equipped with electric vehicle charging equipment, any officer of the Police Department or any Parking Control Officer is hereby authorized to remove or cause to be removed any vehicle that is parked or left standing in such a manner that it blocks access to the electric vehicle charging

equipment. The procedure for removal and impounding of vehicles shall be as is provided for in Article \_\_, Section \_\_ *(insert the appropriate code section from local parking or traffic code)* and Sections 22850 to 22854 of the California Vehicle Code. *(core provision)*

**SEC. \_\_. SEVERABILITY.** If any section, subsection, paragraph, subparagraph, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional, invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance. The *(insert name of governing board of local agency)* declares that it would have passed each section, subsection, paragraph, subparagraph, sentence, clause or phrase of this Ordinance irrespective of the fact that any portion of this Ordinance could be declared unconstitutional, invalid or ineffective.

**SEC. \_\_. EFFECTIVE DATE.** The provisions of this Chapter shall be effective upon adoption by the *(insert name of governing board of local agency)* and certified by the *(insert City Clerk or other appropriate official)*.

APPROVED AS TO FORM:

City Attorney

By: \_\_\_\_\_  
Name  
City Attorney